On the road again

Vincent Dubé and Denis Pilon

rucking plays a major role in Canada's economy. More than 53% of exports to the United States and 78% of all imports were shipped by truck in 2004. But, because of the sector's steady growth, an aging workforce, and the declining popularity of the occupation, the industry may soon face a shortage of qualified truckers. According to one study, 37,000 new drivers will be needed annually in the coming years (CTHRC 2003).

The challenge of recruiting and retaining qualified truckers is also exacerbated by provincial minimumage regulations and insurance premiums for drivers under age 25. This article presents a recent overall picture of truck drivers based on various sources (see *Data sources and limitations*). Three major facets of the occupation are examined: employment, socio-economic characteristics, and labour market characteristics.

Structural changes in the job market

According to the Labour Force Survey (LFS), there were approximately 271,000 truckers in Canada in 2004, up 28% from 1987—slightly less than the 29% increase registered for overall employment (Table 1).1 Nearly two-thirds of truckers worked for an employer whose principal activity was directly associated with transportation and warehousing.2 This group of workers closely corresponds to the segment of trucking defined as 'for-hire' (see The trucking industry), since 95% of them (166,000) work in the truck transportation subsector.5 After transportation and warehousing, the main employers were manufacturing, wholesale trade and retail trade. Truckers working for employers whose principal activity is not transportation, but who own vehicles primarily intended to transport their own goods, are included in the segment called private truck-

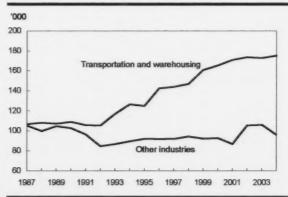
The authors are with the Transportation Division. Vincent Dubé can be reached at (613) 951-7031, Denis Pilon at (613) 951-2707 or both at perspectives@statcan.ca.

Data sources and limitations

No single source provides complete information on truckers. Data are drawn primarily from the Labour Force Survey but also from the Census, the Survey of Labour and Income Dynamics, and the Quarterly Motor Carriers of Freight Survey. Because these sources do not cover exactly the same population, estimates will vary. Also, since the surveys do not necessarily have the same reference year, the most recent data have been given precedence. Lastly, considering the great diversity of the trucking sector, caution must be exercised in generalizing results about the occupation as a whole. For various characteristics (for example, wages or hours worked), it is not possible to distinguish between local and long-distance truckers—a major limitation.

ing. While truckers were evenly distributed between the two segments in 1987, the for-hire segment accounted for almost the entire increase subsequently. This appears to be a result of increased outsourcing (Chart A).

Chart A Since 1987, transportation and warehousing has seen most of the increase in truckers.



Source: Labour Force Survey

Table 1 Truckers by industry

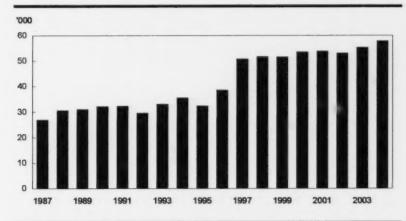
	1987		2004	
	'000	%	'000	%
Industries	212.2	100	271.3	100
Agriculture, forestry, fishing and hunting	2.6	1	2.5	1
Mining, and oil and gas	6.2	3	5.9	2
Construction	14.6	7	13.0	5
Manufacturing	33.9	16	27.0	10
Wholesale trade	14.3	7	21.0	8
Retail trade	15.7	7	11.3	4
Transportation and warehousing	106.8	50	175.3	65
Public administration	4.0	2	2.5	1
Business, building and other support services	1.6	1	3.4	1
Other industries	12.5	6	9.4	3

Wage earners predominate

Source: Labour Force Survey

Nearly 80% of all truck drivers in 2004 were wage earners. These drivers work for a company and are assigned a truck for a given period. Depending on its size, the company may own a fleet of anywhere from two to more than a hundred trucks (Table 2).

Chart B The number of self-employed truckers continues to rise slowly.



Source: Labour Force Survey

Self-employed truckers, on the other hand, have their own equipment (either owned or leased) and are responsible for their own arrangements. They may also have employees to assist them: some 7% had paid help in 2004. Approximately 94% of self-employed truckers were classified as being in for-hire trucking.

Since 1987, the number of selfemployed truckers has generally grown slowly. On the other hand, the number of wage-earning truckers has tended more to fluctuate, declining by 13,000 between 2002 and 2004 (Charts B and C).

A typically male occupation

Despite campaigns to promote non-traditional jobs, women still occupy a marginal place within the occupation. According to the 2004 LFS, 97% of truckers were men. While different factors have contributed to this situation, the number of hours spent outside the home may be a major drawback for women wishing to start a family (Table 3).

An aging population

Truck drivers constitute a relatively older workforce, with an average age of 42 for wage-earning truckers and 45 for their self-employed counterparts in 2004. Also, a larger proportion were 55 or older: 18%, compared with 13% for workers in general.

Among the 10 most popular of over 500 occupations classified for men, truck driving ranked second behind janitors, caretakers and building superintendents. Trucking has also seen the largest increase in average age since 1987 (Table 4).

Table 2 Distribution of truckers

	All		Trucking		
	occupations	Total	For-hire	Private	
		'000			
Total jobs	15,949.7	271.3	165.6	105.7	
,	%				
Employees	85	79	67	97	
Self-employed	15	21	33	3	
With paid help	34	7	6	F	
Without paid help	65	93	94	F	

Source: Labour Force Survey, 2004

The ratio of entrants (men under 25) to those who will retire over the next 10 years (men 55 and over) underlines the greying of the occupation (Chart D). While the downward slope of the curve is not a positive outcome, the presence of ratios below unity is especially troubling, since it means that more will be leaving than entering the industry (negative flows). For example, the ratio of 0.5 in 2001 indicates that there were twice as many male truckers aged 55 and over as under 25.

To better assess the phenomenon of aging, a second ratio was calculated using those under 30 as the entrant group. Despite a certain lag, essentially the same trend was observed. The year 2004 marked the first time truckers 55 and over outnumbered those under 30.

Unless the situation turns around (as a result of increased immigration, for example; see Growing proportion of immigrants among truckers), the occupation may be hit by a large number of retirements in the coming years. However, truckers may be more likely to remain longer in the labour force. For example, trucking was the sixth

most popular occupation among employed men aged 65 and over in 2001—4,255, up 82% from 1996 (Duchesne 2004). Also, a U.S. study found that the tumover rates for older or more experienced truckers tend to be lower, since a change of employment entails greater risks (Min and Lambert 2002). A survey of unemployed truck drivers points in a similar

Growing proportion of immigrants among truckers

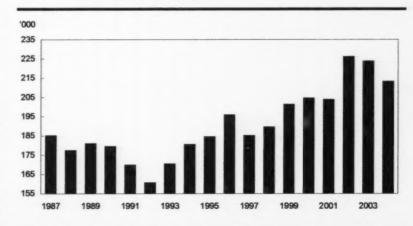
According to the 2001 Census, 13% of truckers in the labour force were immigrants, up 88% since the 1991 Census. Approximately one-third had been in Canada for less than 10 years in 2001, compared with 19% in 1991. Even so, the proportion of immigrants in trucking remained below the 20% for all occupations.

direction with the finding that younger drivers are more likely to resign than older ones (CTHRC 2003).

Little new blood

Just as worrisome is the lack of young truck drivers. Only 5% of truckers were under 25 in 2004, compared with 15% in the labour force as a whole. Similarly, just over one-quarter of truckers were between 15 and 34, whereas the proportion in the labour force as a whole was 37%.

Chart C Wage-earning truckers decreased slightly in 2004 for the second straight year.



Source: Labour Force Survey

The trucking industry

The Quarterly Motor Carriers of Freight Survey provides a more detailed picture of employment in for-hire trucking (medium and large carriers only).³ According to this survey, in 2004, 66% of truckers were classified as company drivers (that is, employees); 29% were owner-operators (self-employed); and 5% were paid by personnel agencies.

About three-quarters of truckers were engaged mainly in long-distance (76%) rather than local trucking.4 The two types differ in several major respects, particularly working conditions. For example, long-distance truckers do not usually return to their home terminal each evening and must keep a daily logbook to comply with the National Safety Code on hours of service.

Approximately 62% of truckers in 2004 hauled mainly general freight as opposed to specialized freight. One of the principal differences between these activities is the type of equipment used. As a rule, general freight is transported on pallets inside standard vans or semitrailers, while specialized freight requires adapted equipment. Some 16% of truckers worked for employers who hauled mainly 'other specialized freight' (cars, livestock), while 9% worked for employers shipping bulk liquids.

Distribution of truckers in for-hire trucking¹

	Total	Company drivers	Owner operators	Agency drivers
Total	126,100	82,600	36,900	6,600
Overall distribution	100	66	29	5
Activity				
General freight	62	61	77	61
Household goods	3 9	3	1	2
Liquid bulk	9	3 9 7	5 5	2 8 7
Dry bulk	7	7	5	7
Forest products	4	4	1	4
Other specialized freight	16	15	12	17
Distance ²	122,500	79,800	36,200	6,500
Local	24	26	20	17
Long distance	76	74	80	83
Load	63,000	40,300	18,500	4,200
Tourstale and	74	74	%	70
Truckload	71	71	69	72
Less than truckload	29	29	31	28

1 Carriers with annual operating revenues of a million dollars or more.

2 Excludes household goods moving. Source: Quarterly Motor Carriers of Freight Survey, 2004

Just over 70% of long-distance truckers carrying general freight were engaged in truckload haulage-carrying freight from a single shipper to its final destination. The rest specialized in less-than-truckload haulage-carrying freight from more than one shipper in a single shipment-which requires the use of truck terminals for assembling freight.

From the standpoint of supply, this seems to indicate that today's young workers are less inclined than the previous generation to enter the occupation. Various reasons are cited—the demanding lifestyle, the poor perception of the occupation, and the appeal of competing occupations (particularly in construction). Only a study of young workers would provide definitive answers.

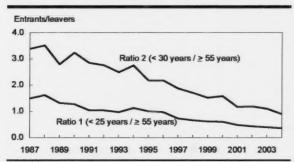
As to demand for truckers, several factors come into play. First, the minimum age for obtaining a commercial vehicle driver's licence undoubtedly plays a role. In Canada, this ranges between 18 and 20 depending on the province, while in most U.S. states, the age is 21. In practice, the transport companies demand an even higher minimum age than that set by legislation. While this could be related to the high cost of insur-

ance for young drivers (especially in international transport), it is more likely due to the importance given to practical driving experience. In a survey of fleet managers, experience was cited as the decisive factor in hiring a trucker (CTHRC 2003). Furthermore, the minimum experience required to drive a semi-trailer truck was three years.

Low education levels do not necessarily reflect skills

Overall, truckers have a lower than average education level. Even though the qualification level for the occupation is high school completion, LFS figures show that more than one-third of truckers did not have a high school diploma in 2004, compared with only

Chart D Truckers are greying more rapidly than other workers.



Source: Labour Force Survey

guage of work. In Quebec, the proportion was 40%. Measures to make markets more open at the international level under NAFTA have likely also favoured English as a language of work in francophone settings. It is in fact essential that truckers crossing the border be able to function in English with U.S. customs officers.

Few differences among the provinces

Overall, the distribution of truckers within the provinces was similar to that of the labour force as a whole in 2004 (Table 3). However, British Columbia and Alberta had higher proportions of truckers in private trucking than in for-hire. Conversely, in Ontario, a much larger proportion were in for-hire trucking.

14% of all workers. A major reason may be that many employers have not required any diploma or certificate other than the driver's licence corresponding to the type of truck used.⁷ Additionally, the larger proportion of older workers in the occupation could also have an impact, since previous generations are generally more likely to have less education.

Also, the training given to truckers is not always reflected by education level (Nix 2003). Although some courses may lead to recognized accreditation, this is not always the case-in-house training by the employer for example. Many professional drivers appear to need training in order to better adapt to the current labour market (MacLeod 2002). However, the issue of training and skills is fairly complex. For example, more education may increase the likelihood of truckers finding a job outside the trucking sector (CTHRC 2003).

English often used at work

According to the 2001 Census, some 85% of Canadian truckers reported using English as a lan-

Table 3 Distribution of truckers

	All		Trucking	
	occupations	Total	For-hire	Private
			1000	
Total jobs	15,949.7	271.3	165.6	105.7
			%	
Employees	84.6	78.7	67.2	96.6
Self-employed	15.4	21.3	32.8	3.4
Age				
15 to 24	15.4	5.4	3.8	7.9
25 to 54	71.5	76.0	77.5	73.7
25 to 34	21.7	20.1	21.2	18.4
35 to 44	25.9	28.9	29.3	28.3
45 to 54	23.9	27.0	27.0	27.1
55 and older	13.1	18.5	18.3	18.9
Sex				
Men	53.2	97.5	97.6	97.3
Women	46.8	2.5	2.4	2.7
Education				
Less than high school	14.4	33.9	34.5	32.9
High school	20.3	27.0	24.5	30.9
Some postsecondary	10.0	8.9	9.5	7.9
Postsecondary certificate or diploma	34.1	27.2	28.6	25.1
University degree	21.2	3.0	3.0	3.1
Province				
Newfoundland and Labrador	1.3	1.1	0.8	1.6
Prince Edward Island	0.4	0.4	0.3	0.7
Nova Scotia	2.8	2.8	2.5	3.4
New Brunswick	2.2	3.3	3.4	3.1
Quebec	23.1	22.3	21.7	23.3
Ontario	39.6	35.6	38.0	31.8
Manitoba	3.6	4.5	4.9	3.9
Saskatchewan	3.0	4.1	4.3	3.7
Alberta	11.0	12.9	12.1	14.2
British Columbia	12.9	13.0	12.0	14.7

Source: Labour Force Survey, 2004

Table 4 Average age of male employees by occupation¹

	1987	2004	Change
All occupations	35.6	38.3	2.7
Truck drivers	37.2	42.4	5.2
Retail persons and sales clerks	30.7	32.4	1.7
Retail trade managers	34.6	39.7	5.1
Farmers and farm managers	33.2	35.9	2.7
Material handlers	32.2	35.6	3.4
Janitors, caretakers and building superintendents	38.5	42.7	4.2
Automotive service technicians, truck mechanics and mechanical repairers	32.9	36.3	3.4
Carpenters	35.6	36.9	1.3
Construction trades helpers and labourers	31.8	32.1	0.3
Food counter attendants, kitchen helpers and related occupations	23.5	24.7	1.2

¹ Top 10 occupations for men according to the 2001 Census. Source: Labour Force Survey

Full-time, less unionized, and more in small workplaces

According to the LFS, approximately 97% of wage-earning truckers worked full time in 2004. About one-quarter were unionized, less than the proportion for employees in general (32%). Forhire truckers had a unionization rate about one-third lower than those in private trucking. Furthermore, approximately 78% of wage-earning truckers were in workplaces with less than 100 employees, compared with two-thirds of wage earners overall (Table 5).

An average wage

The average weekly wage of a wage-earning trucker working full time was \$791 in 2004—approximately \$41,100 per year. This was slightly more than the average for all employees (\$778 per week or

\$40,500 per year). Unionized truckers earned about 11% more than their non-unionized counterparts.

The average weekly wage was slightly higher in for-hire than in private trucking, likely because of differences in the work. For-hire truckers generally do more long-distance haulage; private truckers specialize more in local haulage. Also, long-distance truckers generally earn more, since they tend to work longer hours and make more compromises with respect to their personal and family life.

Earning their pay

Obviously, a relationship exists between hours worked and earnings. For example, drivers working 70 hours or more per week averaged more than \$1,000 per week. But despite the often higher rate paid for overtime hours (especially in local freight haulage), the marginal gains of overtime generally fall off. Indeed, a recent American study showed that lower weekly wage rates for truckers are associated with higher probabilities of exceeding the maximum weekly hours allowed under rules governing hours of service (Monaco and Willmert 2003).

Actual earnings of truckers stagnant

The average weekly earnings of truckers have hardly increased since 1998 (Chart E). In real terms, they rose 2% by 2004 for an average annual growth of approximately 0.3%, compared with 0.4% in all occupations. While the diversity of the trucking sector makes it difficult to generalize, the shortage of qualified truckers has so far not caused wages to rise. Even so, some sectors, such as long-distance haulage, may have registered strong wage increases.

Seniority and education level have less impact on wages

Seniority appears to play a minor role in trucking, especially in the for-hire portion. While inexperienced workers face some barriers to entry, those who are hired reach a wage ceiling quickly. A comparison of the least experienced workers in for-hire trucking (aged 20 to 24) with the most experienced (55 and over) shows a wage difference of \$100 per week. The comparable figure for wage earners in general was nearly \$350. Hours worked by age group does not appear to be a major factor in the explanation since few differences are apparent in this regard.

Table 5 Labour force characteristics

	All Trucking				
	occupations	Total	For-hire	Private	
			'000		
Total jobs	15,949.7	271.3	165.6	105.7	
Work arrangements			%		
Full-time	81.5	96.5	97.0	95.8	
Part-time	18.5	3.5	3.0	4.2	
			'000		
Wage earners	13,497.9	213.4	111.3	102.1	
Workplace size			%		
Less than 20 employees	33.1	39.0	42.6	35.1	
20 to 99 employees	32.9	38.7	37.0	40.5	
100 to 500 employees	21.3	17.2	15.8	18.6	
More than 500 employes	12.6	5.2	4.6	5.9	
Unionized	31.8	25.4	19.8	31.6	
Not unionized	68.2	74.6	80.2	68.5	
			'000		
Full-time wage earners	11,053.5	206.2	108.1	98.1	
			\$		
Weekly earnings According to usual hours worked	777.73	791.37	828.56	740.40	
Less than 30.0 hours	766.06	775.71	800.03	747.66	
30.0 to 39.9 hours	709.09	696.55	709.75	686.94	
40.0 to 49.9 hours	768.32	722.74	754.10	698.65	
50.0 to 59.9 hours	1,002.22	830.16	832.73	826.29	
60.0 to 69.9 hours	1,078.49	917.19	939.01	869.79	
70.0 hours or more	1,176.54	1,032.63	1,042.26	1,010.64	
Usual hours worked			%		
Less than 30.0 hours	15.6	10.1	10.4	9.9	
30.0 to 39.9 hours	32.2	11.5	9.3	14.1	
40.0 to 49.9 hours	41.6	39.9	33.0	47.4	
50.0 to 59.9 hours	6.8	19.3	22.1	16.1	
60.0 to 69.9 hours	2.5	12.0	15.6	8.0	
70.0 hours or more	1.3	7.2	9.5	4.7	
Average	39.5	47.3	50.0	44.4	

Source: Labour Force Survey, 2004

Little wage difference exists among male truckers according to education level. In 2004, the gap was less than \$20 weekly between those who had not obtained a high school diploma, those who had, and those with postsecondary education.

Little wage difference by category of worker

According to the 2001 Census, no major differences were apparent between categories of workers (Table 6). Self-employed truckers nevertheless had a slightly higher annual income than wage earners. However, unlike their employed counterparts, the self-employed are not eligible for benefits, making them less likely to be covered by supplementary medical, dental or disability insurance plans. Without sickness benefits, they are more

likely to incur larger financial losses if illness forces them to stop working (Akyeampong and Sussman 2003). Furthermore, since they are not eligible for an employer-sponsored pension plan, they must save more for retirement.

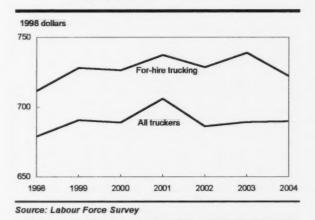
Wage-earning truckers have fewer benefits

Employer-sponsored benefits, such as insurance and retirement plans, are often taken as indicators of job quality (Marshall 2003). According to the 2002 Survey of Labour and Income Dynamics, a smaller proportion of wageearning truckers received benefits than workers overall. This is especially so with respect to retirement plans: only 28% of truckers participated in a job-related pension plan, compared with 44% of all wage earners (Table 7). This is consistent with the finding that Quebec trucking companies have relatively low involvement in retirement plans: only about 25% of them offer such plans (Hébert 2005). On the other hand, roughly 50% provide various other insurance plans (such as medical care, prescription drugs, or life insurance).

Fewer two-income families among truckers

Fewer truckers are in two-income families than workers in general. According to the 2002 Survey of Labour Income Dynamics, approximately 70% of spouses in husband-wife families in which a trucker was the major income recipient had gainful employment, compared with 82% for all workers. This could be because truckers are more likely to work longer hours to support their families (Bess 1999). It may also reflect the

Chart E Real wages of truckers working full time were relatively stagnant from 1998 to 2004.



difficulty in reconciling the heavy demands of the occupation—especially time spent outside the home—with the demands on a two-income family.

Always on the road

Because of the rigours of the job, the highly competitive nature of the sector, and a pay structure that encourages truckers to work more hours to increase their earnings (see A different system of compensation), truckers generally put in a very long workweek. According to the LFS, wage-earning truckers averaged 47 hours per week in 2004, with 38% working 50 hours or more. For their part, self-employed truckers

Table 6 Average earnings of truckers working full time, full year

			Self-employed		
	Total	Wage earners	Total	With paid help	Without paid help
			\$		
Total	38,750	38,770	38,780	39,940	38,230
For-hire	39,230	39,190	39,470	40,400	39,060
Private					
Wholesale trade	36,050	35.970	37.590	38.310	36,910
Manufacturing	41,980	41,940	44,550	F	F
All occupations	43,300	43,450	47,150	55,030	31,470

Source: 2001 Census of Population

A different system of compensation

While most wage earners are paid by the hour or by the week, this is not always the case for truckers. While truckers specializing in local transport are often paid by the shipment (or trip), long-distance truckers are generally paid by the distance travelled.

Also, carriers often implement bonus systems—for example, to motivate truckers to maintain good driving records. According to an independent study of the trucking industry in Quebec, some 10% to 15% of companies give premiums on an individual basis while some 20% pay performance premiums. Overall, these premiums may account for 5% to 7% of truckers' earnings (Hébert 2005).

put in 49 hours per week, with 70% working 50 hours or more. One reason for the longer hours could be that self-employed truckers must spend more time on related activities (management tasks, mechanical maintenance, and so forth).

Truckers in for-hire trucking had an even longer workweek. Wage-earners averaged 50 hours, but 47% put in 50 hours or more. Self-employed truckers averaged 55 hours, with 71% clocking 50 hours or more. This difference arises mainly because truckers working for companies that specialize in hauling freight (for-hire trucking) would be more likely to cover long distances (see Table 5). And, these figures may generally underestimate the actual hours worked by long-distance truckers (Bess 1999; Nix 2003). Since they represent hours usually paid or contracted, they may reflect the official hours entered in logbooks, which often exclude much of the time spent not driving but nevertheless worked. Waiting periods, mechanical checks, and customs inspections are typical

examples of activities often entered as rest periods. This practice enables truckers, most of whom are paid on the basis of distance travelled, to keep their hours of service for driving and thus maximize their earnings (Nix 2003).

Truckers have more irregular schedules

According to the Workplace and Employee Survey, 42% of truckers worked flexible hours in 2001,

Table 7 Employer benefits

	All occupations	Company drivers
		%
Dental care	60.0	54.3
Life/disability insurance	59.8	55.3
Medical insurance	65.0	60.8
At least one of the above	67.4	65.2
Pension plan	43.5	28.1

Note: For persons with a paid job. In the case of those with more than one job, data for the main job were used.

Source: Survey of Labour and Income Dynamics, 2002

meaning that start and stop times could vary. The proportion was higher in for-hire trucking—approximately 45%. This type of schedule was more common among truckers than in the technical and trades occupational group (32%) or all occupations combined (34%). Also, more than a third (34%) of truckers did not work the same number of paid hours each week, not counting overtime. This rate is more than double the 15% overall rate (see *A relatively demanding occupation*).

A relatively demanding occupation

Given that long or irregular work hours may increase stress, it is not hard to imagine the vulnerability of truckers. No Added to this are shipper demands for adherence to schedules despite constraints arising from poor road conditions, traffic congestion, customs delays, and so forth. As well, truckers may be away from family and friends for days at a time. According to the Survey of Labour and Income Dynamics, just over 7 in 10 truckers reported their professional and personal life as being very or somewhat stressful in 2002.

Overall, long hours of work appear to have a harmful effect on health, since they lead to unhealthy changes in lifestyle, such as lack of physical exercise, lack of sleep, and poor eating habits (Shields 2000). It is therefore not surprising that male truckers had one of the highest rates of non-participation in the labour market for health reasons or because of an illness-related disability (3.7% compared with 2.6% for all workers), according to Labour Force Survey figures for 2004. Similarly, each trucker lost an average of nine days for these same reasons during the year, compared with six for male workers in general. 13

Can truckers take comfort in comparisons?

To obtain a broader picture, the working conditions of truckers were compared with other popular occupations for men, as well as those with the same skill

Table 8 Average usual hours and earnings for men working full time

	Hours ² worked	50 hours or more per week	Hourly earnings	Weekly earnings
		%	\$	\$
With or without a high school diploma	41.3	F	17.32	715.60
Top 10 occupations for men ¹				
Truck drivers	47.3	37.7	16.93	792.92
Truck drivers - for-hire trucking	49.9	51.0	16.81	829.56
Retail persons and sales clerks	39.8	7.0	14.09	568.46
Retail trade managers	42.7	15.0	23.63	1,005.57
Farmers and farm managers	48.1	F	13.95	655.94
Material handlers	40.0	1.8	15.58	624.04
Janitors, caretakers and building superintendents	39.6	1.9	14.57	576.83
Automotive service technicians, truck mechanics				
and mechanical repairers	41.1	4.3	17.80	731.52
Carpenters	41.5	5.9	18.09	749.50
Construction trades helpers and labourers	42.4	13.5	15.75	669.14
Food counter attendants, kitchen helpers				
and related occupations	37.0	0.0	9.86	367.81
All occupations	40.7	8.2	21.10	856.08

¹ According to the 2001 Census.

² Weekly hours usually worked.

Source: Labour Force Survey, 2004

How big is the trucker shortage?

Even though employers can identify a shortage in an occupation, no universal definition or direct indicator exists to quantify it. One proposed definition describes a shortage as a situation where the demand for workers in an occupation is greater than the supply of workers who are qualified, available, and willing to do the work under the current market conditions (Shah and Burke 2003). Labour shortages are complex and take different forms. For instance. a certain quantity of labour may be available for work whose skills (defined as a combination of experience, education and training) do not match the job or else do not meet the high expectations employers have been used to. The situation could also arise where a pool of qualified workers exists, but would rather work in a different occupation under the current market conditions (recruitment problem).

In the absence of an exact measure, one way to determine the size of a shortage in an occupation is to observe various characteristics (pressure points) of the labour market, such as trends in employment and earnings (Veneri 1999). Growth rates in employment and wages as well as the unemployment

rate have been used here to identify pressure points that have developed in the past three years. 14 Pressure points are observed in an occupation when:

- its annual employment growth is at least 50% higher than the overall rate
- . its annual earnings growth is at least 30% higher than the overall rate
- its annual unemployment rate is at least 30% lower than the average for all occupations.

Pressure points

	Job	Earnings	Unemploy- ment rate, 2004	Pressure points
	Aver	rage annual 1-2004 (%)	%	
All occupations	2.2	2.3	7.2	0
Truck drivers	1.8	1.4	5.3	0
For-hire	0.8	1.6	3.9	1
Private	4.2	1.4	7.4	1

Source: Labour Force Survey, 2001 to 2004

Overall, none of these criteria identified pressure points in the trucker occupation in 2004. However, if the analysis is refined, a pressure point is observed in each segment of the trucking sector. First, the unemployment rate in for-hire trucking in 2004 was 46% lower than that observed overall; and second, the average annual employment growth in private trucking from 2001 to 2004 was nearly double that of all occupations. This result is for the occupation as a whole at the national level. In the case of a specific population, such as long-distance truckers in Ontario, the result could be different.

level (high school completion or less). Weekly hours, hourly wages, and weekly wages were used as indicators of working conditions.

Trucking ranked second in weekly hours, behind farmers but far ahead of other occupations. It also ranked second in weekly wages, behind retail trade managers. Truckers' wages were considerably higher than those with a high school diploma or less, but lower than wages for all occupations. Despite the high number of weekly hours, the hourly earnings of truckers fell in the middle of the range. Hourly rates were also fairly similar to those in occupations with the same skill level. However, they remained below hourly earnings for male full-time workers as a group (Table 8).

Summary

Nearly 271,000 persons worked as truckers in 2004. Four in five were employees, while the others were self-employed (owner-operators). Just over 60% of

all truckers worked directly for a company whose principal activity was truck transport of freight. Overall, truckers are almost exclusively men and tend to be older and less educated than the average. Also, their ranks contain a smaller percentage of immigrants than overall. Truckers earn a wage close to the average for all occupations, but they receive fewer benefits, especially with respect to a pension plan. By the same token, they work many more hours than the average for all occupations, often according to irregular schedules.

Perspectives

■ Notes

1 These are the earliest data available from the LFS. The year 1987 was also when the trucking industry was deregulated under the *Motor Vehicle Transport Act*.

- 2 In the LFS, industry is determined by the general nature of the activity performed by the employer for whom the respondent works (main job only).
- 3 These are companies with annual revenues of \$1 million or more and whose purpose is to transport freight for remuneration.
- 4 A road carrier can engage in both local and long-distance trucking activities. Data on movers are excluded.
- 5 This subsector includes businesses whose main activity is transporting freight by truck.
- 6 According to Marshall (1993), women in families with children or with both spouses working generally take on the largest share of household responsibilities.
- 7 There are additional requirements depending on the type of freight transported (for example, dangerous goods) or the type of equipment used.
- 8 Rates based on the number of kilometres can vary depending on whether the truck is loaded or empty, weight of the load, type of freight, loading capacity (for example, number of pallets), destination (international, interprovincial or intraprovincial), and so forth.
- 9 Coefficient of variation indicates that this statistic should be interpreted with caution.
- 10 According to Williams (2003), the source of workplace stress most often cited by workers in 1994 and 2000 was too many demands or hours on the job.
- 11 These are persons aged 16 and over with truck driver as their main job.
- 12 The non-participation rate is the proportion of hours lost in relation to total weekly hours usually worked by all full-time employees. Only full-time male employees were used.
- 13 The number of days lost per worker is calculated by multiplying the non-participation rate by the estimated number of workable days in the year (250). Only full-time male employees were used.
- 14 These criteria are a variant of those described and applied by the U.S. Bureau of Labor Statistics (see Veneri 1999).

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